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TITLE: Ring-Closing Metathesis of Macrocyclic Compounds and Cross-Metathesis of Allyl Esters of Amino Acids Leading to Peptidomimetics

AUTHORS: Tammy K.C. Low and Eric Enholm

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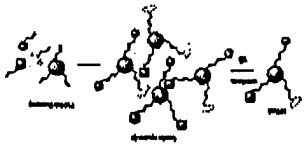
Ring-Closing Metathesis of Macrocyclic Compounds and Cross-Metathesis of Allyl Ester of Amino Acids Leading to Peptidomimetics

TAMMY K.C. LOW and ERIC J. ENHOLM
DEPARTMENT OF CHEMISTRY, UNIVERSITY OF FLORIDA, GAINESVILLE, 32611

INTRODUCTION

Ring-closing and cross-metathesis reactions are important tools in organic synthesis. The reversibility of cross-metathesis makes it ideal for use in dynamic combinatorial chemistry. In particular, we are interested in generating a library of new cyclic peptidomimetics. The reversibility of the reaction, the modified amino acids, and the dynamic bioassay aspects are all of interest in this study.



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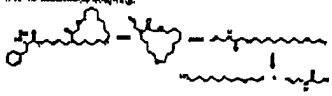

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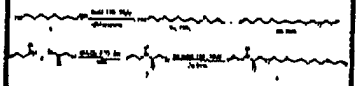

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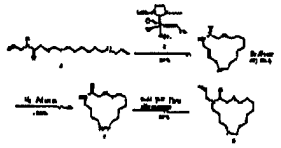
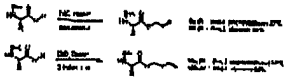


AMINO ACID DERIVATIVES



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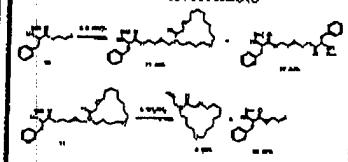
CROSS-METATHESIS



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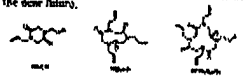

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[illegible] Group Members:
Joel Hennings, Sophie Klein, Ryan Marlin, and Kalyan Mandal

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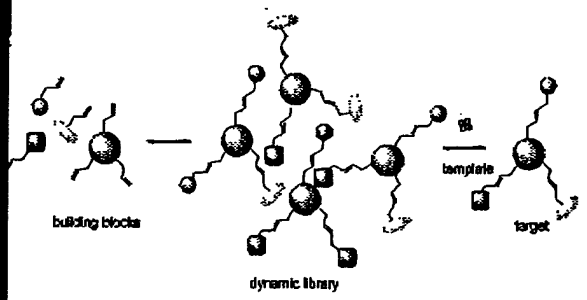

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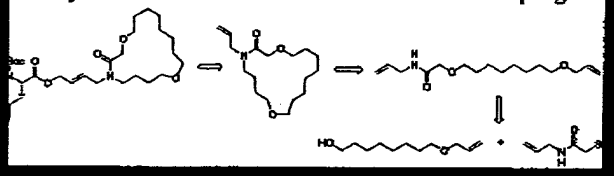

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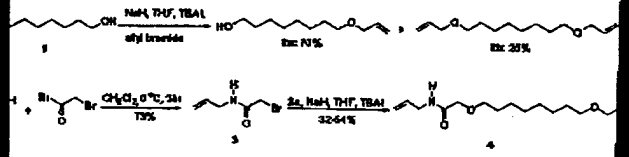

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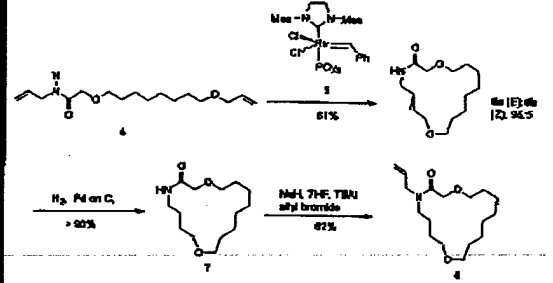

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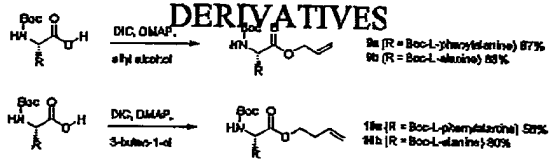
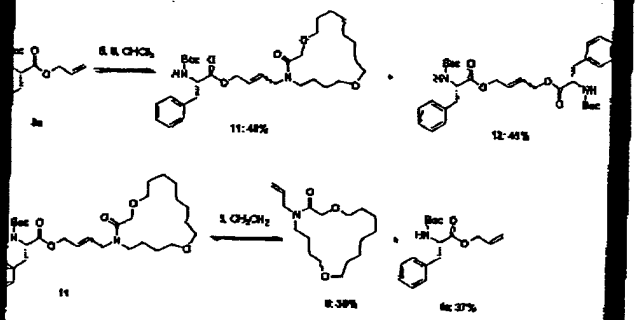


[1] Blackwell H. E. et al. *J. A. Chem. Soc.* 2000, *122*, 58-71
[2] Reichwein, J. F.; Liskamp, R. M. J. *Eur. J. Org. Chem.* 2000, *12*, 2335-2344
[3] Hiraki, H. et al. *Tetrahedron Lett.* 2004, *45*, 1091-1094

CROSS-METATHESIS



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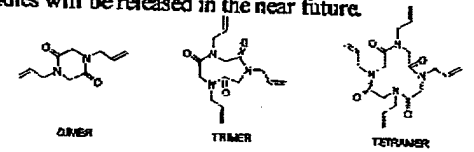

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Enholm Group Members:
Jed Hastings, Sophie Klein, Ryan Martin, and Kalyan Mondal